

SEQUENCE LISTING

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 GODA, YASUHIRO
 HIROBE, MASATO

<120> PROTEIN CAPABLE OF BINDING PLASTICIZER

<130> 64312(46590)

<140> 10/553,305

<141> 2005-10-14

<150> PCT/JP04/005250

<151> 2004-04-13

<150> JP 2003-110877

<151> 2003-04-15

<160> 34

<170> PatentIn version 3.3

<210> 1

<211> 363

<212> DNA

<213> Mus musculus

<220>

<221> CDS

<222> (1)..(363)

<400> 1

gag	gtg	cat	ctg	gtg	gag	tct	ggg	gga	gac	tta	gtg	agg	cct	gga	ggg	48
Glu	Val	His	Leu	Val	Glu	Ser	Gly	Gly	Asp	Leu	Val	Arg	Pro	Gly	Gly	
1				5					10					15		
tcc	ctg	aaa	ctc	tcc	tgt	gca	gcc	tct	gga	ttc	act	ttc	gga	agt	tat	96
Ser	Leu	Lys	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Gly	Ser	Tyr	
			20					25					30			
ggc	atg	tct	tgg	gtt	cgc	cag	act	gca	gac	aag	agg	ctg	gag	tgg	gtc	144
Gly	Met	Ser	Trp	Val	Arg	Gln	Thr	Ala	Asp	Lys	Arg	Leu	Glu	Trp	Val	
		35					40					45				
gca	acc	att	tat	agt	ggt	ggt	ttt	tac	acc	tac	tat	cca	gac	agt	gtg	192
Ala	Thr	Ile	Tyr	Ser	Gly	Gly	Phe	Tyr	Thr	Tyr	Tyr	Pro	Asp	Ser	Val	
		50				55					60					
agg	gga	cga	ttc	acc	atc	tcc	aga	gac	aat	gtc	aag	gaa	atc	gtg	tat	240
Arg	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Val	Lys	Glu	Ile	Val	Tyr	
65					70					75				80		
ctg	caa	atg	agc	agt	ctg	aag	tct	gag	gac	aca	gcc	atg	tat	tac	tgt	288
Leu	Gln	Met	Ser	Ser	Leu	Lys	Ser	Glu	Asp	Thr	Ala	Met	Tyr	Tyr	Cys	
					85				90					95		

gca aga cgg acg gta gta tct acg gac tat act ttg gac tac tgg ggt 336
 Ala Arg Arg Thr Val Val Ser Thr Asp Tyr Thr Leu Asp Tyr Trp Gly
 100 105 110

caa gga acc tca gtc atc gtc tcc tca 363
 Gln Gly Thr Ser Val Ile Val Ser Ser
 115 120

<210> 2
 <211> 121
 <212> PRT
 <213> Mus musculus

<400> 2
 Glu Val His Leu Val Glu Ser Gly Gly Asp Leu Val Arg Pro Gly Gly
 1 5 10 15

Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Ser Tyr
 20 25 30

Gly Met Ser Trp Val Arg Gln Thr Ala Asp Lys Arg Leu Glu Trp Val
 35 40 45

Ala Thr Ile Tyr Ser Gly Gly Phe Tyr Thr Tyr Tyr Pro Asp Ser Val
 50 55 60

Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Val Lys Glu Ile Val Tyr
 65 70 75 80

Leu Gln Met Ser Ser Leu Lys Ser Glu Asp Thr Ala Met Tyr Tyr Cys
 85 90 95

Ala Arg Arg Thr Val Val Ser Thr Asp Tyr Thr Leu Asp Tyr Trp Gly
 100 105 110

Gln Gly Thr Ser Val Ile Val Ser Ser
 115 120

<210> 3
 <211> 318
 <212> DNA
 <213> Mus musculus

<220>
 <221> CDS
 <222> (1) .. (318)

<400> 3

gat	atc	cag	ata	aca	cag	att	aca	tcc	tcc	ctg	gct	gcc	tct	ctg	gga	48
Asp	Ile	Gln	Ile	Thr	Gln	Ile	Thr	Ser	Ser	Leu	Ala	Ala	Ser	Leu	Gly	
1				5					10					15		

gac	aga	gtc	acc	atc	agt	tgc	cgg	cca	agt	cag	gac	atc	agc	aat	ttt	96
Asp	Arg	Val	Thr	Ile	Ser	Cys	Arg	Pro	Ser	Gln	Asp	Ile	Ser	Asn	Phe	
		20					25						30			

tta	aac	tgg	ttt	cag	cag	aaa	cca	gat	gga	act	gtt	gaa	gtc	ctg	atc	144
Leu	Asn	Trp	Phe	Gln	Gln	Lys	Pro	Asp	Gly	Thr	Val	Glu	Val	Leu	Ile	
		35					40					45				

tgc	tac	aca	tta	aga	atg	cac	tta	gga	gtc	cca	tca	acg	ttc	agt	ggc	192
Cys	Tyr	Thr	Leu	Arg	Met	His	Leu	Gly	Val	Pro	Ser	Thr	Phe	Ser	Gly	
	50					55					60					

tgt	gtg	tct	gga	aca	tat	tat	act	ctc	acc	agt	agc	aac	ctg	gaa	caa	240
Cys	Val	Ser	Gly	Thr	Tyr	Tyr	Thr	Leu	Thr	Ser	Ser	Asn	Leu	Glu	Gln	
65					70					75				80		

gaa	gat	ata	gac	act	tcc	ttt	gcc	att	agg	att	ata	cgc	gtg	ctc	acg	288
Glu	Asp	Ile	Asp	Thr	Ser	Phe	Ala	Ile	Arg	Ile	Ile	Arg	Val	Leu	Thr	
				85					90					95		

gtc	ggt	gca	ggg	acc	acg	ctg	gag	ctg	aaa							318
Val	Gly	Ala	Gly	Thr	Thr	Leu	Glu	Leu	Lys							
			100					105								

<210> 4

<211> 106

<212> PRT

<213> Mus musculus

<400> 4

Asp	Ile	Gln	Ile	Thr	Gln	Ile	Thr	Ser	Ser	Leu	Ala	Ala	Ser	Leu	Gly
1				5					10					15	

Asp	Arg	Val	Thr	Ile	Ser	Cys	Arg	Pro	Ser	Gln	Asp	Ile	Ser	Asn	Phe
		20					25						30		

Leu	Asn	Trp	Phe	Gln	Gln	Lys	Pro	Asp	Gly	Thr	Val	Glu	Val	Leu	Ile
		35					40					45			

Cys	Tyr	Thr	Leu	Arg	Met	His	Leu	Gly	Val	Pro	Ser	Thr	Phe	Ser	Gly
	50					55				60					

Cys	Val	Ser	Gly	Thr	Tyr	Tyr	Thr	Leu	Thr	Ser	Ser	Asn	Leu	Glu	Gln
65					70					75				80	

Glu	Asp	Ile	Asp	Thr	Ser	Phe	Ala	Ile	Arg	Ile	Ile	Arg	Val	Leu	Thr
				85					90					95	

Val Gly Ala Gly Thr Thr Leu Glu Leu Lys
 100 105

<210> 5
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 linker

<400> 5
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 1 5 10 15

<210> 6
 <211> 14
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 linker

<400> 6
 Gly Ser Thr Ser Gly Ser Gly Lys Ser Ser Glu Gly Lys Gly
 1 5 10

<210> 7
 <211> 18
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 linker

<400> 7
 Gly Ser Thr Ser Gly Ser Gly Lys Ser Ser Glu Gly Ser Gly Ser Thr
 1 5 10 15

Lys Gly

<210> 8
 <211> 12
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic linker

<400> 8

Gly Ser Thr Ser Gly Lys Pro Ser Glu Gly Lys Gly
1 5 10

<210> 9

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic linker

<400> 9

Gly Ser Thr Ser Gly Ser Gly Lys Pro Gly Ser Gly Glu Gly Ser Thr
1 5 10 15

Lys Gly

<210> 10

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 10

gcttgccggg tgggccac

18

<210> 11

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 11

acactgctgg acagggat

18

<210> 12

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 12

ggatcccggg agtaccctt gaccaggc

28

<210> 13

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 13

gttgaagctc ttgacaat

18

<210> 14

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 14

ggatcccggg tggatggtgg gaagatg

27

<210> 15

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<220>

<221> modified_base

<222> (24)

<223> inosine

<220>

<221> modified_base

<222> (25)

<223> inosine

<220>

<221> modified_base

<222> (29)

<223> inosine

<220>
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 <223> inosine

<220>
 <221> modified_base
 <222> (34)
 <223> inosine

<220>
 <221> modified_base
 <222> (35)
 <223> inosine

<400> 15
 ggccacgcgt cgactagtac gggnnngggnn gggnnng

36

<210> 16
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 primer

<400> 16
 ggccacgcgt cgactagtac

20

<210> 17
 <211> 35
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 primer

<400> 17
 actagtcgac atggttrtccw casctcagtt ccttg

35

<210> 18
 <211> 19
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 primer

<400> 18
 ggaaacagct atgaccatg

19

<210> 19
 <211> 17
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 primer

<400> 19
 gtaaaacgac ggccagt

17

<210> 20
 <211> 58
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 primer

<400> 20
 attgttatta ctgcgagccc aaccggccat ggccgaggtg catctggtgg agtctggg

58

<210> 21
 <211> 59
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 primer

<400> 21
 ccgccggatc cacctccgcc tgaaccgcct ccacctgagg agacgatgac tgaggttcc

59

<210> 22
 <211> 56
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 primer

<400> 22
 caggcggagg tggatccggc ggtggcggat cggatatcca gataacacag attaca

56

<210> 23
 <211> 67
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
primer

<400> 23

gctcaacttt cttgtcgact ttatcatcat catctttata atctttcagc tccagcgtgg 60
tccctgc 67

<210> 24

<211> 348

<212> DNA

<213> Mus musculus

<220>

<221> CDS

<222> (1)..(348)

<400> 24

gat gta caa ctt cag gag tca gga cct ggc ctc gtg aaa cct tct gag 48
Asp Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
1 5 10 15

tct ctg tct ctc acc tgt tct gtc act ggc tac tcc atc acc agt ggt 96
Ser Leu Ser Leu Thr Cys Ser Val Thr Gly Tyr Ser Ile Thr Ser Gly
20 25 30

tat tac tgg aat tgg atc cgg caa ttt cca gga aac aaa ctg gat tgg 144
Tyr Tyr Trp Asn Trp Ile Arg Gln Phe Pro Gly Asn Lys Leu Asp Trp
35 40 45

atg ggc cat ata agt tac gac ggt aac aat aac tac aac cca tct ctc 192
Met Gly His Ile Ser Tyr Asp Gly Asn Asn Asn Tyr Asn Pro Ser Leu
50 55 60

aaa aat cga atc tcc atc act cgt gac aca tct aag aac cag ttt ttc 240
Lys Asn Arg Ile Ser Ile Thr Arg Asp Thr Ser Lys Asn Gln Phe Phe
65 70 75 80

ctg aag ttg aat tct gtg act act gag gac aca gat aca tat tac tgt 288
Leu Lys Leu Asn Ser Val Thr Thr Glu Asp Thr Asp Thr Tyr Tyr Cys
85 90 95

tct atg atc ctc tat ggt atg gac tac tgg ggt cag gga acc tca gtc 336
Ser Met Ile Leu Tyr Gly Met Asp Tyr Trp Gly Gln Gly Thr Ser Val
100 105 110

acc gtc tcc tca 348
Thr Val Ser Ser
115

<210> 25

<211> 116

<212> PRT

<213> Mus musculus

<400> 25

Asp Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1 5 10 15

Ser Leu Ser Leu Thr Cys Ser Val Thr Gly Tyr Ser Ile Thr Ser Gly
 20 25 30

Tyr Tyr Trp Asn Trp Ile Arg Gln Phe Pro Gly Asn Lys Leu Asp Trp
 35 40 45

Met Gly His Ile Ser Tyr Asp Gly Asn Asn Asn Tyr Asn Pro Ser Leu
 50 55 60

Lys Asn Arg Ile Ser Ile Thr Arg Asp Thr Ser Lys Asn Gln Phe Phe
 65 70 75 80

Leu Lys Leu Asn Ser Val Thr Thr Glu Asp Thr Asp Thr Tyr Tyr Cys
 85 90 95

Ser Met Ile Leu Tyr Gly Met Asp Tyr Trp Gly Gln Gly Thr Ser Val
 100 105 110

Thr Val Ser Ser
 115

<210> 26

<211> 324

<212> DNA

<213> Mus musculus

<220>

<221> CDS

<222> (1)..(324)

<400> 26

cag att gtt ctc acc cag tct cca gca atc atg tct gca tct cta ggg 48
 Gln Ile Val Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Leu Gly
 1 5 10 15

gaa cgg gtc acc atg acc tgc act gcc agc tca agt gta agt tcc agt 96
 Glu Arg Val Thr Met Thr Cys Thr Ala Ser Ser Ser Val Ser Ser Ser
 20 25 30

tac ttg cac tgg tac cag cag aag cca gga tcc tcc ccc aaa ctc tgc 144
 Tyr Leu His Trp Tyr Gln Gln Lys Pro Gly Ser Ser Pro Lys Leu Cys
 35 40 45

att tat agc aca tcc aac ctg gct tct gga gtc cca act cgc ttc agt 192
 Ile Tyr Ser Thr Ser Asn Leu Ala Ser Gly Val Pro Thr Arg Phe Ser
 50 55 60

ggc agt ggg tct ggg acc tct tac tct ctc aca ata agc agc atg gag 240
 Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu
 65 70 75 80

gct gaa gat gct gcc act tat tac tgc cac cag tat cat cgt tcc cca 288
 Ala Glu Asp Ala Ala Thr Tyr Tyr Cys His Gln Tyr His Arg Ser Pro
 85 90 95

ccc acg ttc ggc tcg ggg aca aag ttg gaa ata aaa 324
 Pro Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
 100 105

<210> 27
 <211> 108
 <212> PRT
 <213> Mus musculus

<400> 27
 Gln Ile Val Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Leu Gly
 1 5 10 15

Glu Arg Val Thr Met Thr Cys Thr Ala Ser Ser Ser Val Ser Ser Ser
 20 25 30

Tyr Leu His Trp Tyr Gln Gln Lys Pro Gly Ser Ser Pro Lys Leu Cys
 35 40 45

Ile Tyr Ser Thr Ser Asn Leu Ala Ser Gly Val Pro Thr Arg Phe Ser
 50 55 60

Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu
 65 70 75 80

Ala Glu Asp Ala Ala Thr Tyr Tyr Cys His Gln Tyr His Arg Ser Pro
 85 90 95

Pro Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
 100 105

<210> 28
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 28

gctggccggg tgggcaac

18

<210> 29

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 29

actagtcgac atggatttwc aggtgcagat twtcagcttc

40

<210> 30

<211> 60

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 30

attgttatta ctgcggccc aaccggccat ggccgatgta caacttcagg agtcaggacc

60

<210> 31

<211> 61

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 31

ccgccggatc cacctccgcc tgaaccgcct ccacctgagg agacggtgac tgaggttccc

60

t

61

<210> 32

<211> 55

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 32
 caggcggagg tggatccggc ggtggcggat cgcagattgt tctcaccag tctcc 55

<210> 33
 <211> 66
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 primer

<400> 33
 gctcaacttt cttgtcgact ttatcatcat catctttata atcttttatt tccaactttg 60
 tccccg 66

<210> 34
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 linker

<400> 34
 Gly Gly Gly Gly Ser
 1 5